

Notes from Task Force 1 meeting October 30, 2007: Mike Pearlman, Erricos Pavlis, Mark Torrence attending.

Using Werner Gutner's Grasse session 3 presentation, and Georg Kirchner's questions/comments/email as points of departure for discussion:

Analysis Centers → Stations:

The quick look analyses show large variance between AC's, particularly the biases estimation. There could be many causes for the differences, most notably differences in station positions used in the various analyses. Each quick look analysis center (DGFI, MCC, HitoUniv, JCET, and SHAO) will be requested to fill out the analysis parameterization survey for the quick look analysis procedures and email them back to Mark/Erricos by November 15. The task force (Mark/Erricos) will review the surveys for similarities and differences which should lead to the implementation of standards to assure more consistent quick look reports. The current AWG's action to have the weekly POS+EOP product in a consistent frame (named version 10) based on the new SLRF2005 *a priori* and the new IERS 05 C04 compatible EOP *a priori* series should be used as point of departure to have the quick look centers adopt a similar, consistent frame for their work.

Upon resolution of the differences, the weighted average biases reported in the AIUB weekly combined bias report should be a better indicator of data anomalies, and will hopefully provide less ambiguous guidance to the stations. A site for which a data anomaly has been identified will be notified via email giving the pass and bias value(s). We anticipate that anomalies can be detected automatically at the 90+% level, but there should be a person to oversee the sending of the notices, and to examine unresolved anomalies. All sites will receive weekly emails indicating the AC's assessment of the site's data; be it positive or negative. The email will be sent to two individual points of contact at the site, not through any ILRS email exploders. Sites will be asked to identify the two POC's to receive the email. The weekly response should be examined to determine whether it is timely enough for problem identification and resolution.

Station → Analysis Centers

The normal point format has one character-fields for system change and system configuration:

column 46: System Change indicator (SCH). A flag to increment for every major change to the system (hardware or software). After the value '9' return to '0', and then continue incrementing. The station and data centers should keep a log in a standard format of the value used, the date of the change, and a description of the change.

column 47: System Configuration Indicator (SCI). A flag used to indicate alternative modes of operation for a system (e.g., choice of alternative timers or detectors, or use of a different mode of operation for high satellites). Each value of the flag indicates a particular configuration, which is described in a log file held at the station and at the data centers. If only a single configuration is used then use a fixed value. If a new configuration is introduced then use the next higher flag value. If value exceeds '9' then return to '0', overwriting a previous configuration flag (it is not likely that a station will have 10 current possible configurations).

Some key questions

1. How do the sites interpret these fields?
2. Do the sites use the SCH and/or SCI?
3. If the fields are used, what triggers a change in the SCH or SCI?

4. Could the event that triggered a change of the SCH be recorded in an EDF (<http://www.astr.lu.lv/edf/>) - Georg?
5. If the event that triggered an SCH or SCI change is significant enough to possibly cause a data anomaly, do the sites email that information to all AC's that are participating in production of the ILRS weekly standard EOP+POS product (and soon, the ILRS daily EOP standard product) as soon after the event as possible – within two hours (?)

Question for the AC's: is the SCH and SCI read during the analysis? If so, is any action taken if there is a change in the SCH and SCI?

Question for HTSI: Is a QA/QC performed on all normal point data by HTSI before being put into CDDIS?

Analysis Centers ↔ Stations

General comments about methodology for communicating anomalies between ACs and sites to initially use vetted email, and probably include “real time” applets as (as “telnet aiuli3.unibe.ch 7810” per slmail.1553) soon.

Action Items:

- Erricos: contact quick look analysis centers to fill out the analysis parameterization survey for the quick look analysis procedures to be emailed back to Mark/Erricos by November 15.
- Georg (NWE): poll the sites about their use of the SCH and SCI; Are the data flags used?; What triggers a change?
- Erricos: poll both the AC's and AAC's to determine whether or not they use the SCH and/or SCI data flags.
- Georg/Werner: what h/w or s/w changes could cause systematic effect(s) in the data.
- Mark: contact HTSI to assure the QC/QA is done on ALL fields in the data, and ask whether new s/w is being developed for the CRD format

We should identify an action to examine the QC outputs once the centers have moved to the new “standard/uniform” coordinates.

Next Meeting: November 20 at noon at GSFC. December 10 at AGU.

Yarragadee bias as calculated by quick look analysis centers:

